

Expert: Adherence key in achieving HIV targets



Dr Patrick Oyaro,
Chief of Party, USAID Stawisha Pwani Project

By Tebby Otieno | tebbyotieno62@gmail.com

More than 60,000 people aged 15-49 are living with HIV in Mombasa County.

Data by the National AIDS and STI Control Programme (NASCOP) further shows that prevalence in Mombasa remains higher among women at 7.6 per cent compared to men at five per cent.

According to the 2020 data, 3,223 children aged 0-14 and 2,394 adolescents aged 10-19 in the county are also living with HIV.

However, efforts to achieve viral load suppression is still lower in children compared to that of adults.

Only 48 per cent of children living with HIV are on antiretroviral therapy (ART) compared to 80 per cent of adults. Of the adults who are on ART, 89 per cent have achieved viral suppression, compared to 75 per cent of children aged 14 years and below.

This data was presented by the Sub County HIV/AIDS & STI Coordinator for Changamwe and Jomvu, George Kissinger, during the a science café organised by Media for Environment, Science, Health and Agriculture (MESHA) in Mombasa on December 14, 2021.

Develop low-cost generics for long-acting injectable – expert

By Clifford Akumu
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Kenya's pharmaceutical companies have a duty to develop low-cost generic long-acting injectables for HIV treatment, a researcher has said.

The move, the researcher added, is key in transforming HIV treatment in the country.

"Pharmaceuticals have the obligation to lower the costs of these treatments," said Beatrice Nyagol, a research officer during a media science café organised by Media for Environment, Science, Health and Agriculture (MESHA) in Mombasa County, on December 14.

"As it stands, even if the injectable is approved by the least developed countries, we will not afford it. Remember as a country we still rely on donor funding to get drugs," said Nyagol.

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This publication has been compiled and edited by Godfrey Ombogo

Expert: Adherence key in achieving HIV targets

"Once people get HIV, they have it for life. But with proper medical care, HIV can be controlled. People living with HIV who get antiretroviral (ARV) treatment can live long, healthy lives and protect their partners," said Dr Patrick Oyaro, Chief of Party of USAID Stawisha Pwani project supporting HIV and TB prevention in Mombasa, Kwale, Kilifi and Taita Taveta counties.

"People with AIDS have badly damaged immune systems. They get an increasing number of severe illnesses called opportunistic infections," said Dr Oyaro, who also made his presentation at the same event.

He said people receive an AIDS diagnosis when they develop certain opportunistic infections or when their cluster of differentiation 4 (CD4) count drops below 200 cells per millilitre of blood.

Antiretroviral therapy is HIV medicine taken by those living with HIV. Dr Oyaro, who is also an epidemiologist, however, warns that taking this medicine does not prevent transmission of other sexually transmitted infections.

"HIV treatment involves taking medicine that reduces the amount of HIV in your body. There is no effective cure for HIV but with proper medical care, you can control it," he said.

Since the first case of HIV was reported in Kenya in 1984, scientists have made great milestones to get its treatment. For instance, the country currently offers immediate treatment to people diagnosed with HIV after it adopted the World Health Organisation's recommendations five years ago.

"In the absence of curative treatment or an effective vaccine, ART remains the mainstay of HIV treatment and prevention.

Current antiretroviral regimens have, for the most part, achieved optimal antiretroviral efficacy and tolerability, transforming HIV infection from a deadly disease into a manageable chronic condition," said Beatrice Nyagol, a Clinical Research Officer with Impact Research and Development Organisation (IRDO).

Nyagol, who addressed the café virtually, said the introduction of Highly Active Antiretroviral Therapy (HAART) almost two decades ago has improved treatment efficacy.

"Simplification from complex regimens to single fixed-dose multidrug pills have definitely improved both the efficacy and the tolerability of HIV infection management. A challenge in the use of current oral ARV formulations for HIV prevention is the requirement for adherence to daily or near-daily dosing strategies," she said.

She however, noted that men living with HIV are significantly less likely to be on treatment than women, while initiating and staying on treatment is particularly problematic for adolescents and young people.

Nyagol warned that poor adherence to treatment can also lead to increased drug resistance. She said adoption of long-acting injectable ARV and HIV vaccines in Kenya remains another huge challenge.

All the three health experts said that there is a silver bullet in prevention and encouraged that everybody considers a combination of the available prevention measures. These are consistent and proper use of condoms, pre-exposure prophylaxis, post-exposure prophylaxis, healthy lifestyles, screening and management, medical male circumcision and ART for partners living with HIV.

Call for low cost generics for long-acting injectable

In the US, the newly approved Cabenuva (cabotegravir and rilpivirine) injectable treatment will cost Sh400,000 (\$3,960) a month, or more than (Sh4.8 million) \$47,500 a year. In Kenya, a full dose of ARVs for one year costs about Sh20,000 (\$200). The injectable is administered once a month.

Nyagol said that unless such deals are negotiated for the long-acting injectables, "the new treatment is likely to take years before reaching developing countries, where they will still be too expensive".

Long-acting injectable ART is not yet available in Kenya for public use, but only for use in ongoing prevention trials, the researcher added.

Apart from the United States, only Europe and Canada have approved the drug.

The approvals are supported by findings from clinical trials showing 94 per cent of participants injected with the regimens achieved fully suppressed viral loads for at least six months.

"After years of evaluating HIV prevention strategies for women, I am thrilled that we have found CAB LA so effectively reduces HIV acquisition and provides women more choices in how to protect themselves," said Dr Mina Hosseinipour, HPTN 084 protocol co-chair and professor of medicine at the University of North Carolina (UNC).

"Adoption of long-acting injectable in Kenya is still a huge challenge," said Nyagol.

Kenya likely to roll out long-acting ART

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Jasmine Atieno

By Jasmine Atieno | @sparkleMine

Kenya is expected to approve an injectable taken once every two months to prevent HIV, following studies that show the injectable is highly effective.

The studies demonstrated superiority of the two regimen (Cabotegravir and Rilpivirine) long-acting injection among women in sub-Saharan Africa.

According to the latest data provided by researchers from the HIV Prevention Trials Network (HPTN) in November 2020, the HPTN 084 clinical trial indicated that a pre-exposure prophylaxis (PrEP) regimen of long-acting

cabotegravir (CAB LA) injections once every eight weeks was safe and superior to daily oral tenofovir/emtricitabine for HIV prevention among cisgender women in sub-Saharan Africa.

The study enrolled 3,223 women at research sites in Botswana, Eswatini, Kenya, Malawi, South Africa, Uganda, and Zimbabwe.

The average age of study participants was 26 years and 57 per cent of participants were 18-25 years old.

"The study is a breakthrough for Kenyan women as they will have longer acting prevention method that doesn't require daily dosing and also adds to existing PrEP options," said Beatrice Nyagol, a research officer with the

Kisumu-based Impact Research and Development Organisation. She spoke at a science café organised by the Media for Environment, Science, Health and Agriculture (MESHA) on December 14 in Mombasa.

She said Kenya can take up to five years before approving the long-acting PrEP.

Nyagol said in Kenya the study was carried out by the Kenya Medical Research Institute in Kisumu, which compared the long-acting injectable with available oral PrEP.

During a planned review of study data, an independent Data and Safety Monitoring Board recommended the study sponsor - the National Institute of Allergy and Infectious Diseases (NIAID) - stop the blinded phase of the trial and share the results. The study was originally designed to continue through 2022.

The HPTN 084 study is jointly funded through a partnership between NIAID, the Bill & Melinda Gates Foundation, and ViiV Healthcare. Study drugs were provided by ViiV Healthcare and Gilead Sciences, Inc.

According to Dr Sinead Delany-Moretlwe, HPTN 084 protocol chair and research professor at the University of the Witwatersrand in South Africa, the results from HPTN 084 are incredibly important for women in Africa where lowering HIV incidence remains a priority.

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Kenya likely to roll out long-acting ART

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"We know that adherence to a daily pill continues to be challenging, and an effective injectable product such as long-acting CAB is a very important additional HIV prevention option for them.

We are grateful to the women who volunteered for this study and the research staff, as this study would not have been possible without their commitment to HIV prevention," said Dr Sinead.

Eighty-two per cent of the women enrolled were not living with a partner, 55 per cent reported two or more partners in the past month, with 34 per cent having a primary partner who is reported to be living with HIV or having an unknown HIV status.

A total of 38 HIV infections occurred during follow-up. Approximately nine times more incident HIV infections occurred in the TDF/FTC arm than in the CAB arm.



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Background and paper tear: iStock

These results meet the statistical criteria for superiority of CAB LA compared to TDF/FTC in the HPTN 084 study population. The higher-than-expected level of adherence to TDF/FTC throughout the study

and overall low incidence rate in both arms of the study clearly demonstrate both drugs were highly effective at preventing HIV acquisition.



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Adolescents make majority of Mombasa's new HIV infections

By **Mkamburi Mwawasi** | mwawasilydia@gmail.com

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Adolescents and young adults aged 15 to 24 years are leading in new HIV infections in Mombasa County between 2020 and 2021, a new report by the National Aids Control Council (NACC) says.

George Kissinger, HIV Coordinator in Changamwe, Mombasa County, said 64 per cent of new infections are attributed to this priority group.

He said that they are engaged in risky behaviours, which lead to them getting infected.

Among the behaviours mentioned included alcoholism, peer pressure and injecting drugs.

Kissinger was speaking during a science café hosted by Media for Environment, Science, Health and Agriculture (MESHA) in Mombasa on December 14.

According to the 2020 World Aids Day Report, drug use and alcohol consumption increases the risk of exposure to HIV and other sexually transmitted infections.

"Excessive alcohol consumption and drug abuse are known to affect the judgement of an individual, which results in high-risk behaviour," reads the report.

Additionally, there is a direct exposure to HIV through needles for adolescents and youth who inject drugs.

However, 15-year-old Marion (not her real name) said as a girl from the village, she was not aware of the different ways she can protect herself from getting infected with HIV.



Mkamburi Mwawasi

"I have just moved to Mombasa from my village and without the knowledge of the different ways of protecting myself, I have found myself having unprotected sex on several occasions. I have also been getting sexually transmitted infections," she said.

She said the Mombasa County government should come up with ways to reach each and every youth in the six sub-counties to enlighten them on the importance of using protection during sexual intercourse.

Kissinger, however, says there are several drop-in centres in the sub-counties with health workers who are ready to assist round the clock.

"There is a need to identify these adolescents living with HIV and have them put on treatment to avoid more infections," he said.

He said that with combined prevention services such as Pre-Exposure Prophylaxis (PrEP), counselling and behaviour change, the trend can be changed.

Pre-exposure prophylaxis (PrEP) is a course of HIV drugs taken by HIV-negative people to protect them against HIV infection.

"We always have programmes for those who are already infected by putting them on PrEP, and having counselling sessions for those who are not infected to abstain," Kissinger added.

He said peer educators are also available to speak to the adolescents before and after testing and give them HIV prevention and family planning options.

These targeted combined interventions, also known as COMBO are part of the Kenya Prevention Revolution Roadmap, an approach that seeks to accelerate reduction of HIV incidence and improve treatment outcomes in the country. It was conducted in Turkana, Homa Bay and Mombasa counties.

The doctor called on different stakeholders, including the civil society, to support the initiative by bringing together adolescents and young people and informing them on the importance of accessing health facilities to help fight new infections among them.

HIV: Mombasa's falling numbers explained

By Ruth Keah | rkeahkadide@gmail.com

New HIV infection rate in Mombasa County has reduced due to availability and accessibility to treatment, a health worker has said.

Speaking to journalists during the 52nd science media café by MESHA in Mombasa, George Kissinger, the Changamwe Sub-County HIV-AIDS Coordinator, said the situation is replicated in the country.

"There were only 600 people accessing treatment as of 2019 compared to now that 1.2 million people are on treatment," said Kissinger.

Nationally, new HIV infections in 2019 were 41,416, with adults aged 15 years and above at 34,610 and children below 14 years being 6,806. In Mombasa, new infections stood at 1,717, comprising 1,464 adults and 253 children.

Dr Kissinger said the inclusion of key population in the fight against new HIV infections was the key driver in the success. The key population includes sex workers, men who have sex with men (MSM) and people who inject drugs (PWID).

According to statistics, HIV prevalence at the Coast among sex workers and their clients is 18.2 per cent, MSM and prisons 20.5 per cent and PWID 6.1 per cent.

People who inject drugs are among the groups most vulnerable to HIV infection. It is estimated that they are 22 times more likely to acquire HIV than the rest of the population.

Kissinger said at the moment, around 1,500 out of 300,000 drug users in Mombasa are on medication assisted treatment with methadone-MAT clinic. The mat clinic is a substitution therapy for drug users, which is safer and helps them overcome drug addiction.

"The main challenge now is how to empower them economically because most of them are jobless. This might trigger them to remain in the groups and do petty crimes for them to survive," he said.

Currently, Kissinger said they are working with approximately 8,000 sex workers in a programme that provides HIV prevention interventions.

"What we do, we enroll this one woman who is doing sex work and support her in a package care for one year, with prevention interventions from counseling to providing condoms, lubricants, STIs screening, family planning and harm reduction," he said.

Besides the reduced number of new HIV infections in Mombasa, the HIV prevalence among adolescents and mother-to-child transmission (MTCT) are still worrying. Prevalence among adolescents is at 64 per cent, while MTCT is at 11.2 per cent, compared to the national rate of 10 per cent.

"If we are to achieve the less than five per cent target, then we need to have interventions that will contribute to that reduction. That will mean doing a lot of testing for pregnant women and their partners," Kissinger said.

With the support of some civil society organisations, Kissinger says there is intervention to make sure that they close the gap. This includes strengthening integrated primary care and comprehensive SRH and HIV service, refocusing on adolescent girls and young women, strengthening community-based PMTCT approach, leverage on Universal Health Coverage (UHC), among others.

Photo Credit | Akumu Clifford



Ruth Keah.

Kissinger said even though sexual relationships of the same gender are not accepted in law, the same law allows those involved access to healthcare services.

"The access to healthcare, including mental care, has helped them make informed decisions," he said.



A peer educator attends to a woman in Siaya: Community groups work together in Kenya in response to HIV.

Medic: 95-95-95 target achievable

By Tebby Otieno | tebbyotieno62@gmail.com

It is possible to achieve the 2030 HIV 95-95-95 target, an expert has said.

The target means that 95 per cent of the population should know their HIV status by 2030, 95 per cent of those who know their status should be on treatment, while 95 per cent of those on treatment should have their viral loads suppressed.

"We are on track, and community and health facility teams have to work together for us to achieve the 95-95-95 target," said Dr Patrick Oyaro, chief of party of USAID Stawisha Pwani project, supporting HIV and tuberculosis (TB) prevention in Mombasa, Kwale, Kilifi and Taita Taveta.

Dr Oyaro spoke in an interview with journalists after addressing the 52nd science café organised by Media for Environment, Science, Health and Agriculture (MESHA) on December 14 in Mombasa.

However, in order to achieve the target, Dr Oyaro says all stakeholders need to work together to mobilise or sensitise the community on the need to get tested.

The various stakeholders include community health workers, peer educators, administrations like chiefs and religious leaders.

"If this works well, I am convinced that we will be able to test everyone that needs to be tested," he said.

Apart from testing, Dr Oyaro said those who test positive have to be enrolled on treatment while those who test negative get prevention referrals.

"Right now we have what we call test and treat. As soon as you are positive you are linked immediately so that you are initiated on treatment. Those who test negative are referred for prevention because I might be negative today and after two weeks, I am exposed and I get infected," he said.

The 95-95-95 target was launched after 90-90-90 target, which was to be achieved by 2020, made progress. According to UNAIDS 2020 data, 90 per cent of Kenya's population were aware of their HIV status as at 2019. Of the 90 per cent population, 82 per cent were on HIV treatment while 92 per cent of those on treatment were virally suppressed.

HIV is a virus that attacks cells that help the body fight infection. Even though there is no effective cure for HIV as at now, scientists say that with proper medical care, one can control the virus.

Dr Oyaro, who is also a medical doctor and epidemiologist, told journalists that HIV infection in humans came from a type of chimpanzee in Central Africa.

"The chimpanzee version of the virus (called simian immunodeficiency virus, or SIV) was probably passed to humans when they hunted these chimpanzees for meat and came in contact with their infected blood," said Dr Oyaro.

How to choose a HIV self-test kit

Photo Credit | Akumu Clifford



Asha Bekidusa

By Asha Bekidusa
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More residents in Mombasa are using OraQuick than any other HIV self-test kits.

According to Dr Patrick Oyaro, the Chief of Party at USAID Stawisha Pwani projects in Mombasa, Kwale, Kilifi and Taita Taveta counties, evidence suggests that more people prefer OraQuick because it is easy to use.

Unlike in other kits where one has to prick themselves to get a blood sample, OraQuick uses oral fluids that are collected through a swab of the gums.

Dr Oyaro said there is still low uptake of the HIV self-test kits in Coast region due to the cost of acquiring a kit privately.

He said most kits in hospitals are given to expectant women, who most of the time are not accompanied by their spouses.

"We give expectant women the HIV self-test kits to take home to their spouses but some of them say their partners have refused to self-test," said Dr Oyaro.

He was speaking during a MESHA science café held in Mombasa on December 14, 2021.

The doctor said that while doing his studies, he found out that most pregnant women embrace HIV self-test kits as opposed to visit a hospital to do the test.

He added that those who are not ready to use the self-test kits are those who already suspect something about their status and are not ready to confirm it.

Also those who are illiterate find it hard to use the kits because they cannot read the instructions.

"Some fear what will happen if the results turn positive and those who cannot read instructions have a hard time to get the correct results," added Dr Oyaro.

According to National AIDS and STIs Control Programme (NASCOP), there are four nationally approved HIV self-test kits, including OraQuick, INSTI, SureCheck and Atomo.

INSTI uses simple flow-through technology to detect HIV-1 and HIV-2 antibodies using a drop of human fingerstick blood.

SureCheck is a qualitative, single-use in-vitro diagnostic self-test for detection of antibodies to HIV-1 and HIV-2 in fingerstick whole blood, while Atomo requires one to prick their finger to get a blood sample.

A 2019 survey by PSI, a local non-governmental organization (NGO), in Nairobi and Mombasa showed a growing prevalence of non-approved kits, mostly imported from South Africa or China.

The biggest concern from the survey was that kits were rarely on public display. Only a quarter of providers displayed self-testing kits on open shelves.

Photo Credit | File photo



Caleb Kinguara, a journalist from Migori displays a self test kit.

The shoppers used in the survey found that many private facilities tried to sell them unregistered kits. Such kits were hawked cheaply at Sh150 a piece instead of the Sh500 kits approved by the Ministry of Health.

"Providers tried to influence the choice of testing kit, for instance promoting a non-quality-assured kit, stating that it was cheaper and gave faster results than the quality-assured self-test," shows the survey.

How the long-acting ARV works in the body

Photo Credit | File photo



Beatrice Nyagol: a research officer at Impact Research Development Organisation, Kisumu.

By Ruth Aura | auraruth8@gmail.com

HIV treatment has over the years evolved from as many as 15 pills taken in one sitting to the current daily combination tablet.

However, the daily pill is still burdensome and the long-acting injectable is expected to be introduced in Kenya soon.

In Australia, the Transient Global Amnesia (TGA) approved an injectable treatment called Cabenuva, an injectable drug combination consisting of a long-acting Cabotegravir and Rilpivirine. It is taken once every eight weeks to treat HIV.

However, the treatment has been approved to only be used by adults and not adolescents.

Beatrice Nyagol, a research officer at Impact Research Development Organisation, said that there is a current study going on to get long-term injectable treatment for adolescents.

Nyagol said that the injectable treatment works more the same way as family planning pills in the body.

"The long-term injectable contraceptive is usually released slowly in the body. Once it is injected in the body, it rises steadily to the protective level and can be sustained for a longer period in the body," she said.

Nyagol was speaking during a media science café organized by MESHA in Mombasa on December 14.

Nyagol said that once the injection in the body gets concentration, it takes eight weeks to prevent the body from HIV infection.

The drug comes as a relief to patients because they do not have to take the daily pills.

However, Nyagol said people living with HIV will first need to use the daily pills before they can be placed on injectables.

"For a person who has never used the injectable, they are supposed to use the tablets for the first four weeks in order to allow the body to get used to the drugs. After four weeks, a person is now allowed to use injection for the remaining six weeks," she said.

Nyagol said that the injectable can be dangerous in the body if used without preparing the body to receive it.

For the injectable to work steadily in the body, one has to use the combination therapy where another pill is used because HIV, according to the researcher, has the characteristic to change.

"The only two pills which are approved to be used along with the injectable are Cabotegravir and Rilpivirine for prevention of the infections in the body," she said.

Just like Pre-Exposure Prophylaxis (PrEP) works 99 per cent with proper adherence, Nyagol said that the oral or injectable drugs work better in women where 89 per cent are protected.

In men, studies have not revealed the exact percentage of prevention. However, pregnant women are not allowed to use the injectable treatment because they are not allowed to use Cabotegravir.

"The safety of the injectable treatment in pregnant women is not yet established, although the studies are being done. They will only be allowed to use it after further studies are conducted," she said.

The leading long-acting injectable, Cabotegravir and Rilpivirine, has been evaluated as a two-drug maintenance regimen that could be used after a person with HIV achieved an undetectable viral load with oral triple-combination ART.

Engaging MESHA café brings journalists up to speed on HIV response

Photo Credit | Akumu Clifford



George Kissinger demonstrates how to put on a female condoms.

By Jasmine Atieno | atienojasmine@gmail.com

Media for Environment, Science, Health and Agriculture (MESHA) held a media café on December 14, 2021, at the City Blue Hotel, Mombasa to update journalists on the key researches and milestones made so far in the response against HIV.

The training started with a presentation from Dr Patrick Oyaro, Chief of Party of USAID Stawisha Pwani project supporting HIV and TB prevention in Mombasa, Kwale, Kilifi and Taita Taveta counties.

Dr Oyaro took the journalists through the history of HIV, the milestones in terms of researches, key contributions made in the search for HIV cure and vaccines and the current status.

This was followed by an informative presentation on the status of HIV fight in Mombasa County, by Sub County HIV/AIDS & STI Coordinator for Changamwe and Jomvu, George Kissinger.

Kissinger gave a breakdown of the milestones achieved so far with the deployment of a combination of various interventions. He especially excited the journalists with a demonstration of how to put on a female condom, and for a moment, the hitherto quiet but engaging group came to life.

It took the intervention of MESHA Secretary Aghan Daniel, the convener of the café, to bring the hall back to order.

Kissinger's presentation was followed by a virtual one from Beatrice Nyagol, a Clinical Research Officer with Impact Research and Development Organisation (IRDO).

Nyagol introduced the journalists to the HIV Prevention Trial Network 084 clinical trial on two regimen (Cabotegravir and Rilpivirine) long-acting injectable ARV that has proven superior to the oral TDF/FTC for the prevention of HIV. She also intimated on the likelihood of Kenya and other sub-Saharan African countries rolling out the injectable in 2022.

"The study is a breakthrough for Kenyan women as they will have longer acting prevention method that doesn't require daily dosing and it also adds to existing PrEP options," said Nyagol on the study, which includes Kenya, Botswana, Eswatini, Malawi, South Africa, Uganda and Zimbabwe.

The presentations were capped by health editor and trainer Nduta Waweru who gave the journalists life-changing tips on health reporting. She also helped the journalists to identify lots of story ideas from the presentations by the three health experts.

The work of every journalist is to always look for something to write home about from every event.

This was no different with the café. After the presentations, the journalists settled down in three groups to crack their brains and come up with award-winning stories.

With the guidance of three editors – Nduta, John Muchangi and Godfrey Ombogo – the journalists produced informative stories that are published in this edition of Sayansi magazine.

Long live MESHA!